

REMARKS

Acknowledgement of Interview

Applicant's attorney acknowledges with gratitude the examiner's grant of a personal interview on August 9, 2007 to discuss the outstanding issues raised by the final rejection mailed May 2, 2007. During the interview, claims 1 and 21 in particular were discussed and the relevancy of Grimm et al. U.S. 4,962,796 was also discussed. The examiner reiterated the position expressed in the final rejection and applicant's attorney discussed the patentability of claims 1 and 21 over Grimm. During the discussion, the significance of claim 24 was also discussed and in particular the possible incorporation into claim 1 of claim 24 was discussed, and the examiner tentatively agreed that the recitation of the subject matter of claim 24 in claim 1 would appear to overcome the rejection under 35 U.S.C. §103(a) of claim 1. Likewise, incorporation of similar language into claim 21 also was believed by the examiner to overcome the final rejection.

Proposed Amendments under 37 C.F.R. §1.116

Claims 1 and 21 have been amended in a manner that clearly defines the subject matter over the teachings of Grimm et al. Claim 24 was not incorporated into claims 1 and 21 because, upon closer review, the recitation of a thread break on the insertion side of the shed does not appear to be needed to distinguish the invention over Grimm.

More specifically, as discussed during the interview, Grimm fails entirely to provide any disclosure, teaching or suggestion of both a thread clamp and a deflector opposite the insertion side of the shed of the loom, and only shows a combined energy absorber and brake on the insertion side of the shed, and a thread extractor on the far side of the shed.

It is clear from the disclosure of Grimm that the teaching of this patent extends only to a thread brake and an energy absorbing deflection device on the insertion side of the shed intended to decrease the maximum stress in an inserted weft thread as it is braked on the insertion side. There is no clamp and deflector described or disclosed on the side of the shed opposite the insertion side. Contrary to the examiner's observation, it is respectfully submitted that the extractor on the exit side of the shed disclosed in Grimm does not correspond to a thread clamp and moreover is not combined with any weft thread deflector on the same side of the shed.

The objective of the present invention is to prevent snap back of the inserted weft thread into the shed after it has been inserted. With this objective, both the clamp and the deflector are independently controllable by the loom actuator to clamp the inserted thread while the deflector deflects the clamped thread and prevents it from snapping back into the shed. The examiner's attention is invited to the introductory portion of the application beginning on page 2 and extending up to the description of the drawings for a fuller description of the operation of the weft thread clamp and the weft deflector.

Moreover, on page 5, first full paragraph, the problem of weft thread entanglement at the far side of the shed is described as being related to elastic elongation of the weft threads during insertion whereby there is a tendency for the threads to snap back into the interior of the shed and form loops causing a flaw in the weave.

The description on pages 5 and 6 describes the apparatus and the process in more detail, in particular the function of the clamp in conjunction with the deflector whereby the clamp first clamps the weft thread on the side of the shed opposite the insertion side followed by the deflection of the weft thread before it can snap back substantially into the shed.

As described on page 7 of the specification, second full paragraph, the beginning and end of actuation of the thread clamp and the deflector device are determined by the loom control unit (21) as a function of a number of variables as described in the text of the description in the following pages.

Claim 1 has been amended to recite the invention in clearer terms to avoid conflict with the teachings of Grimm and to clearly delineate the novel aspects of the claimed subject matter over Grimm.

The proposed amendments of claim 1 clarifies that the thread clamp disposed on the side of the weaving shed opposite the insertion side is actuatable to clamp an inserted weft thread and that a deflection device is provided upstream of the clamp on the same side of the shed as the clamp and that is actuatable by the loom control unit independently of the thread clamp whereby the clamp and the deflecting device prevent an inserted weft thread from snapping back into the shed.

It is respectfully submitted that the proposed amendments do not raise new issues that will require detailed consideration or further search. The proposed amendments are believed to present the original claimed subject matter in clearer terms to avoid conflict with any reasonable interpretation of the teachings of Grimm et al. As noted previously, there is no teaching in Grimm et al. at the combination of both a

thread clamp and a deflecting device on the side of the shed opposite the insertion side that may be separately actuatable to both clamp and deflect an inserted weft thread.

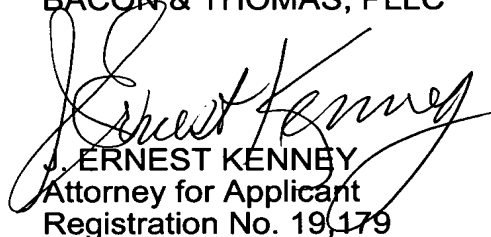
In accordance with Grimm, a thread brake and an energy absorber on the insertion side of the shed will not affect the weft thread after insertion but only during insertion and then only for the purpose of decreasing the maximum stress experienced by the inserted weft thread. The inserted weft thread of the Grimm apparatus only reaches a suction extractor at the far end of the shed and there is no disclosure in Grimm of both clamping and deflecting the inserted weft thread at the far end of the shed, contrary to the present invention.

Claim 21 has been amended so that it is consistent with claim 1 and the comments provided above with regard to the patentability of claim 1 apply equally to the patentability of claim 21.

It is respectfully submitted that the application has been placed fully in condition for allowance by clearly reciting the subject matter for which protection is sought in clear and definite terms that distinguish the invention fully over the teachings of Grimm et al. and the other prior art of record.

In view of the amendments and comments presented herein, it is respectfully submitted that withdrawal of the rejection of claims 1-25 under 35 U.S.C. §103(a) is appropriate and passage of the application to issue is requested.

Respectfully submitted,
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